

This listing of claims will replace all prior versions
and listings of claims in the application:

1 Claim 1 (canceled).

1 Claim 2 (currently amended): The method of claim † 4
2 wherein the selected ~~one of at least one~~ set of
3 configuration information for a data forwarding device is a
4 most recently committed set of configuration information
5 for the data forwarding device.

1 Claim 3 (currently amended): The method of claim † 4
2 wherein the selected ~~one of at least one~~ set of
3 configuration information for a data forwarding device is
4 selected by a user.

1 Claim 4 (currently amended): A method comprising:
2 a) accepting at least a part of a selected set of
3 configuration information for a data forwarding
4 device;
5 b) accepting at least a part of a set of candidate
6 configuration information for the data forwarding
7 device; and
8 c) determining differences, if any, between
9 - the at least a part of the set of candidate
10 configuration information for the data forwarding
11 device, and
12 - the at least a part of the selected set of
13 configuration information for the data forwarding
14 device,

15 The method of claim 1 wherein the set of candidate
16 configuration information for the data forwarding device
17 includes a plurality of statements,

18 wherein a first statement of the plurality of
19 statements of the set of candidate configuration
20 information for the data forwarding device contains a
21 second statement of the plurality of statements to define
22 at least a part of a hierarchical configuration,

23 wherein the selected ~~one of the~~ at least one set
24 of configuration information for the data forwarding device
25 includes a plurality of statements, and

26 wherein a first statement of the plurality of
27 statements of the selected ~~one of the~~ at least one set of
28 configuration information for the data forwarding device
29 contains a second statement of the plurality of statements
30 to define at least a part of a hierarchical configuration.

1 Claim 5 (currently amended): The method of claim 4 wherein
2 the at least the part of the set of candidate configuration
3 information only includes a defined first statement and any
4 of the plurality of statements that are descendants of the
5 defined first statement in the hierarchical configuration,
6 and

7 wherein the at least the part of the selected ~~one~~
8 ~~of the~~ at least one set of configuration information
9 includes a corresponding first statement and any of the
10 plurality of statements that are descendants of the defined
11 first statement in the hierarchical configuration.

1 Claim 6 (original): The method of claim 5 wherein the
2 defined first statement is defined based on a statement of

3 the hierarchical candidate configuration information on
4 which a user is presently working.

1 Claim 7 (original): The method of claim 5 wherein the
2 defined first statement is defined by a user input.

1 Claim 8 (original): The method of claim 4 wherein the
2 hierarchical configuration information includes at least
3 two categories at a first hierarchical level, and
4 wherein the at least two categories are selected
5 from a group of data forwarding device configuration
6 categories consisting of:

- 7 A) chassis configuration information;
- 8 B) class-of-service configuration information;
- 9 C) firewall configuration information;
- 10 D) forwarding-options configuration information;
- 11 E) groups configuration information;
- 12 F) interfaces configuration information;
- 13 G) policy-options configuration information;
- 14 H) protocols configuration information;
- 15 I) routing-instances configuration information;
- 16 J) routing-options configuration information;
- 17 K) network management protocol configuration
- 18 information; and
- 19 L) system configuration information.

1 Claim 9 (original): The method of claim 4 wherein the
2 hierarchical configuration information includes at least
3 two categories at a given hierarchical level, the method
4 further comprising:

- 5 d) associating a predetermined permission value with
6 a user that is logged in; and

7 e) determining whether the logged in user is
8 permitted to access one of the at least two categories
9 of configuration information based on the
10 predetermined permission.

1 Claim 10 (currently amended): A method comprising:
2 a) accepting at least a part of a selected set of
3 configuration information for a data forwarding
4 device;
5 b) accepting at least a part of a set of candidate
6 configuration information for the data forwarding
7 device; and
8 c) determining differences, if any, between
9 - the at least a part of the set of candidate
10 configuration information for the data forwarding
11 device, and
12 - the at least a part of the selected set of
13 configuration information for the data forwarding
14 device,

15 The ~~method of claim 1~~ wherein the act of accepting at
16 least a part of a selected ~~one of at least one~~ set of
17 configuration information for a data forwarding device is
18 performed by accessing a storage device of the data
19 forwarding device,

20 wherein the act of accepting at least a part of a
21 set of candidate configuration information for the data
22 forwarding device is performed by accessing a storage
23 device of the data forwarding device; and

24 wherein the act of determining differences, if
25 any, between

26 - the at least the part of the set of candidate
27 configuration information for the data forwarding
28 device, and
29 - the at least the part of the selected ~~one of~~
30 ~~the at least one~~ set of configuration information
31 for the data forwarding device,
32 is performed by a component of the data forwarding device.

1 Claim 11 (currently amended): A method comprising:
2 a) accepting at least a part of a selected set of
3 configuration information for a data forwarding
4 device;
5 b) accepting at least a part of a set of candidate
6 configuration information for the data forwarding
7 device; and
8 c) determining differences, if any, between
9 - the at least a part of the set of candidate
10 configuration information for the data forwarding
11 device, and
12 - the at least a part of the selected set of
13 configuration information for the data forwarding
14 device,

15 The ~~method of claim 1~~ wherein the set of candidate
16 configuration information for the data forwarding device
17 includes a plurality of statements, ~~at least some of which~~
18 ~~define parameter values,~~

19 wherein the selected ~~one of the at least one~~ set
20 of configuration information for the data forwarding device
21 includes a plurality of statements, ~~at least some of which~~
22 ~~define parameter values,~~ and

23 wherein the act of determining differences, if
24 any, between

25 - the at least a ~~the~~ part of the set of
26 candidate configuration information for the
27 data forwarding device, and
28 - the at least a ~~the~~ part of the selected
29 one of the at least one set of configuration
30 information for the data forwarding device,
31 considers changes to a selected one of (a) statements only,
32 (b) without regard to parameter values only, and (c)
33 statements and parameter values.

1 Claim 12 (canceled)

1 Claim 13 (original): In a data forwarding device, a
2 facility for checking at least a part of a set of candidate
3 configuration information, the facility comprising:
4 a) a storage device for storing at least one set of
5 configuration information for the data forwarding
6 device;
7 b) an input facility for
8 i) accepting at least a part of a selected one
9 of the at least one set of configuration
10 information for a data forwarding device, and
11 ii) accepting at least a part of a set of
12 candidate configuration information for the data
13 forwarding device; and
14 c) a configuration comparison facility for
15 determining differences, if any, between
16 - the at least a ~~the~~ part of the set of
17 candidate configuration information for the data
18 forwarding device, and

19 - the at least a ~~the~~ part of the selected one of
20 the at least one set of configuration information
21 for the data forwarding device.

1 14. (currently amended) A method for determining
2 differences in at least a part of sets of configuration
3 information, comprising:

- 4 a) accepting at least a part of a first set selected
5 one of at least two sets of configuration information
6 for a data forwarding device, wherein the first set of
7 configuration information has not been saved on the
8 data forwarding device as a committed configuration;
9 b) accepting at least a part of a second set selected
10 one of the at least two sets of configuration
11 information for the data forwarding device, wherein
12 the second set of configuration information has been
13 saved on the data forwarding device; and
14 c) determining differences, if any, between
15 - the first set selected one of the at least two
16 sets of configuration information for a data
17 forwarding device, and
18 - the second set selected one of the at least
19 two sets of configuration information for a data
20 forwarding device.

1 15. (currently amended) The method of claim 14 wherein
2 the first set selected one of at least two sets of
3 configuration information for a data forwarding device
4 includes a plurality of statements,
5 wherein a first statement of the plurality of
6 statements of the first set selected one of at least two
7 sets of configuration information for a data forwarding

8 device contains a second statement of the plurality of
9 statements to define at least a part of a hierarchical
10 configuration,

11 wherein the second set selected one of at least
12 ~~two sets~~ of configuration information for a data forwarding
13 device includes a plurality of statements, and

14 wherein a first statement of the plurality of
15 statements of the second set selected one of at least two
16 ~~sets~~ of configuration information for a data forwarding
17 device contains a second statement of the plurality of
18 statements to define at least a part of a hierarchical
19 configuration.

1 16. (currently amended) The method of claim 15 wherein
2 the at least the part of the first set selected one of at
3 ~~least two sets~~ of configuration information for a data
4 forwarding device only includes a defined first statement
5 and any of the plurality of statements that are descendants
6 of the defined first statement in the hierarchical
7 configuration, and

8 wherein the at least the part of the second set
9 ~~selected one of at least two sets~~ of configuration
10 information for a data forwarding device includes a
11 corresponding first statement and any of the plurality of
12 statements that are descendants of the defined first
13 statement in the hierarchical configuration.

1 17. The method of claim 16 wherein the defined first
2 statement is defined by a user input.

1 18. The method of claim 15 wherein the hierarchical
2 configuration information includes at least two categories
3 at a first hierarchical level, and

4 wherein the at least two categories are selected
5 from a group of data forwarding device configuration
6 categories consisting of:

- 7 A) chassis configuration information;
- 8 B) class-of-service configuration information;
- 9 C) firewall configuration information;
- 10 D) forwarding-options configuration information;
- 11 E) groups configuration information;
- 12 F) interfaces configuration information;
- 13 G) policy-options configuration information;
- 14 H) protocols configuration information;
- 15 I) routing-instances configuration information;
- 16 J) routing-options configuration information;
- 17 K) network management protocol configuration
18 information; and
- 19 L) system configuration information.

1 19. (currently amended) The method of claim 14 wherein
2 the act of accepting at least a part of the first set
3 ~~selected one of at least two sets~~ of configuration

4 information for the data forwarding device is performed by
5 accessing a storage device of the data forwarding device,
6 wherein the act of accepting at least a part of
7 the second set ~~selected one of at least two sets~~ of
8 configuration information for the data forwarding device is
9 performed by accessing a storage device of the data
10 forwarding device, and

11 wherein the act of determining differences, if
12 any, between

13 - the first set selected one of at least
14 ~~two sets~~ of configuration information for
15 the data forwarding device, and
16 - the second set selected one of at least
17 ~~two sets~~ of configuration information for
18 the data forwarding device,
19 is performed by a component of the data forwarding device.

1 20. (currently amended) The method of claim 14 wherein
2 the first set selected one of at least ~~two sets~~ of
3 configuration information for a data forwarding device
4 includes a plurality of statements, at least some of which
5 define parameter values,

6 wherein the second set selected one of at least
7 ~~two sets~~ of configuration information for the data
8 forwarding device includes a plurality of statements, at
9 least some of which define parameter values, and
10 wherein the act of determining differences, if
11 any, between

12 - the first set selected one of at least
13 ~~two sets~~ of configuration information for
14 the data forwarding device, and
15 - the second set selected one of at least
16 ~~two sets~~ of configuration information for
17 the data forwarding device,
18 considers a selected one of (a) statements only, (b)
19 parameter values only, and (c) statements and parameter
20 values.

1 Claim 21 (cancelled).

1 Claim 22 (original): In a data forwarding device, a
2 facility for comparing at least a part of sets of
3 configuration information, the facility comprising:
4 a) a storage device for storing at least two sets of
5 configuration information for the data forwarding
6 device;
7 b) an input facility for
8 i) accepting at least a part of a first selected
9 one of the at least two sets of configuration
10 information for the data forwarding device, and
11 ii) accepting at least a part of a second
12 selected one of the at least two sets of
13 configuration information for the data forwarding
14 device; and
15 c) a configuration comparison facility for
16 determining differences, if any, between
17 - the first selected one of the at least two
18 sets of configuration information for the data
19 forwarding device, and
20 - the second selected one of the at least two
21 sets of configuration information for the data
22 forwarding device.

1 Claim 23 (currently amended): A method comprising:
2 receiving with a data forwarding device, a first set
3 of configuration information for the data forwarding
4 device, wherein the first set of configuration information
5 has not yet been committed on the data forwarding device;
6 receiving with the data forwarding device, a second
7 set of configuration information for the data forwarding
8 device;

9 determining with the data forwarding device,
10 differences between the first and second sets of
11 configuration information.

1 Claim 24 (original): The method according to claim 23,
2 wherein the data forwarding device is a router.

1 Claim 25 (currently amended): A data forwarding device
2 comprising:

3 a memory storing a first set of configuration
4 information and a second set of configuration information
5 for the data forwarding device; and
6 a processing module for determining differences
7 between the first and second sets of configuration
8 information stored in the memory.

1 Claim 26 (currently amended): A data forwarding device
2 comprising:

3 a plurality of data interfaces for connection to
4 respective data lines;

5 a mechanism for forwarding data from one data
6 interface to another data interface;

7 a user interface for entering configuration
8 information;

9 a memory storing a first set of configuration
10 information and a second set of configuration information;
11 and

12 a processing module for determining differences
13 between the first and second sets of configuration
14 information stored in the memory.

1 Claim 27 (new): The method of claim 10 wherein the
2 selected set of configuration information for a data
3 forwarding device is a most recently committed set of
4 configuration information for the data forwarding device.

1 Claim 28 (new): The method of claim 10 wherein the
2 selected set of configuration information for a data
3 forwarding device is selected by a user.

1 Claim 29 (new): The method of claim 11 wherein the
2 selected set of configuration information for a data
3 forwarding device is a most recently committed set of
4 configuration information for the data forwarding device.

1 Claim 30 (new): The method of claim 11 wherein the
2 selected set of configuration information for a data
3 forwarding device is selected by a user.

1 Claim 31 (new): The method of claim 14 wherein a command
2 to save the first set of configuration information on the
3 data forwarding device as a committed configuration has not
4 occurred.